already detected influence of the Passover liturgy at more than one point in this section—witness his sub-title: 'Die Passa-Theologische Einheit Jak 5, 7-11'!

ROBERT P. GORDON

THE ORDER OF JEWELS IN REVELATION XXI. 19-20: A THEORY ELIMINATED

THE names of the jewels in Rev. xxi bear a close relation to those on the high priest's breastplate in Exod. xxviii. 17–20 as given in the LXX; the latter are identical with the twelve which appear in the LXX of Ezek. xxviii. 13. Eight of the names in Rev. xxi are the same, and as Bousset showed in his commentary the variation in naming most of the others can be explained, so that we can safely say that the author's intention was to reproduce the Old Testament list. Bousset admitted that he was unable to account for the order, which differs from that given in Exod. xxviii and Ezek. xxviii. Later commentators, however, have given various explanations.

R. H. Charles in his *I.C.C.* commentary (1920) claims that the order of the precious stones is the opposite of the order in an ancient Egyptian Zodiac scheme. The twelve signs of the Zodiac had jewels allocated to them, beginning with amethyst and ending with jasper. John the Seer reversed this order and he did so in order to attack astrology. This explanation has been adopted by others.

Thus G. B. Caird (Revelation of St. John, 1966) discusses various attempts to account for the order and dismisses them all in favour of 'an adequate explanation'. This is the Zodiac argument put forward by Charles. Caird writes on p. 277:

John's order therefore is the exact reverse of the astrological one. He must have derived his list not directly from Exodus, but from his knowledge of astrology; and he then deliberately reversed it to indicate his total disavowal of astrological interest.

The following observations may be made:

Firstly, this would be a very strange way of opposing astrology. No mention is made of constellations in this passage, and no-one until recently suspected that this was what John wished to convey. He is usually able to express his meaning quite forcibly.

Secondly, if he wished to oppose the astrological order, surely the best way would be to scramble the list. To give the exact sequence in a reverse direction is to adopt the Zodiac correspondences, not to discredit them.

It was thought by some of the ancients that a time would come when the heavens would move in a reverse direction, as in Plato's *Politicus* myth (cf. my book *Greek Influence in Jewish Eschatology* (1961), chap. 12).

Thirdly, the principal objection to Charles's view is that he produces no evidence earlier than the seventeenth century for his statement that there was an Egyptian scheme linking the signs of the Zodiac with jewels arranged in the way indicated. His authority is Athanasius Kircher, to whom we shall turn in a moment.

Josephus says that the twelve gems on the high priest's breastplate correspond to the signs of the Zodiac but gives no details. The Targums link the jewels severally with the twelve tribes, but they do not agree among themselves in determining which jewel goes with which patriarch, and no solution of the present problem emerges from this quarter.

Kircher, the renowned Jesuit polymath (1602–80), was born in Germany but spent the last forty and more years of his life at Rome. The work of his to which Charles refers is the immense *Oedipus Aegypticus* (1652–5), the particular passage being II. ii. 177 f. I have consulted this work and it is perfectly true that a table of Zodiac correspondences is set out in detail. Each sign of the Zodiac is linked with a plant, an animal, a colour, a precious stone, etc. It is the stones which interest us and these begin with Amethistus (linked with the Ram) and end with Iaspis (coupled with the Fishes):

Aries	Amethistus	Libra	Sardius
Taurus	Hyacinthus	Scorpio	Sardonix
Gemini	Chrysoprasus	Sagittarius	Smaragdus
Cancer	Topazius	Capricornus	Calcedonius
Leo	Berillus	Aquarius	Saphyrus
Virgo	Chrysolithus	Pisces	Iaspis

These are (as Charles indicated) precisely the twelve stones mentioned in Rev. xxi and they are in the reverse order. Kircher claims that he takes this table from an Arabic writer named Abenephius, and that ultimately it goes back to the ancient Egyptians. His words at the head of the table are: 'Catenae consensus rerum cum 12 signis Zodiaci, juxta mentem veterum Aegyptiorum, ex Arabum monumentis extracta'. (I take monumentis here to mean records; it is surely inappropriate to render it 'monuments' as Charles does.) Kircher is giving, so he claims, the scheme of the ancient Egyptians as transmitted by Arabic writers.

C. Clemen in his book *Primitive Christianity and its non-fewish Sources* (1912, translated from the German original of 1909) had already, before Charles's commentary, written concerning the gems of Rev. xxi:

These precious stones . . . are precisely the same as those which Kircher, in a survey of the subject based on Egyptian and Arabian monuments, regarded as corresponding to the twelve signs of the Zodiac (p. 101).

I may be allowed to mention that this problem has, at sporadic moments, interested me for the space of over twelve years and growing misgivings have led (as the sequel will show) to the conclusion that we should rule out the theory suggested by Clemen and adopted by others after him. Even if this is a negative result, some progress has been made by the elimination of a false trail.

(a) If Kircher is right, then it should be easy to find evidence from ancient Egypt to substantiate his words, particularly as we have an abundance of materials as compared with those available to him 300 years ago. However, I have been in touch with several Egyptologists and no-one is aware of any Zodiac/jewel scheme such as Kircher sets forth.

Before we go further it should be recalled that Kircher, erudite as he certainly was, is a very unreliable authority. For example he claimed to be able to read Egyptian hieroglyphic; but this was not scientifically deciphered until the work of Young and Champollion in the nineteenth century, following the discovery of the Rosetta stone. In this connection a comment from *Peake's Commentary* on the general subject of decipherment could be mentioned:

most efforts at decipherment turn out to be fallacious. The most famous is the grandiose structure of Athanasius Kircher in the 17th century, not a single stone of which was left standing by Champollion (p. 60, W. F. Albright).

If this is a sample of Kircher's work it would seem very unwise to rest anything upon his reports and theories, unless we can find independent corroboration.

There is, it is true, a famous astronomical text from the temple at Dendera in Upper Egypt dating from the time of the emperor Tiberius; but although this mentions precious stones it connects them with decans, and there is nothing which has the slightest resemblance to Rev. xxi. (There are 36 decans in the full circle, each having ten degrees; thus each of the twelve signs of the Zodiac has three decans allocated to it, and in this way the total of 360 degrees is made up.)

Festugière in his celebrated work on the Hermetic literature, which of course emanated from Egypt, sets out a complete scheme of the 36 decans in which each sign of the Zodiac has three precious stones allocated to it, one for each of its decans. Of the 36 gems in this Hermetic scheme some are naturally the same as those in Rev. xxi, but there is

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again not the smallest correspondence in the order. The emerald appears in association with the Scales, the amethyst with the Archer, chalcedony is one of the three connected with the Goat; and the great majority of the 36 stones do not, of course, appear in Rev. xxi at all.

(b) Not only is there a complete absence of the necessary evidence from ancient Egypt, but I have found no examples of this exact scheme earlier than Kircher's time. Here astrological writings are important; but while there were in existence various schemes of correspondence connected with the Zodiac, so far I have been unable to find a single one matching Kircher's diagram.

Cornelius Agrippa of Netthesheim (1486–1535) in his *De Occulta Philosophia* connects the signs of the Zodiac with gems; he begins with the Ram which he links with the amethyst, and continues with agate, beryl, blue emerald, yellow ruby, jasper, green emerald, topaz, turquoise, onyx, sapphire, chrysolite; here the order is quite different from that of Rev. xxi and a number of the gems are different.

Martianus Capella (fifth century) provides an earlier example of a Zodiac scheme; this is given in F. Boll's *Sphaera* (1914), p. 40. He begins with the Twins and ends with the Bull, and the corresponding gems are, as given by Boll: Keraunos, Lychnis, Astrites, Hyakinthos, Dendrites, Heliotropios, Hyadis, Adamas, Kristall, Smaragd, Scythis, Jaspis. It will be seen that this throws no light on either Rev. xxi or Kircher. Boll mentions Kircher but significantly says that he will not rely on him without checking his sources.

Among other books consulted which have produced no evidence of the kind we are seeking are W. G. Collingwood, Astrology in the Apocalypse (1886), Bouché-Leclerq, L'Astrologie grecque (1899); and older works by Giuntini (1583); Luca Gauricus (1560); R. Rueus, De Gemmis in Apocalypsi (1547); Guido Bonatus, De Astronomia Tractatus (1550); Abu Ali (1549); Ali ibn Abi al-Rijal (1551); Marbodus (fl. 1060), Liber de Gemmis (M.P.L. clxxi. 1771 ff.); Epiphanius (fl. 400), On the Twelve Gems.

(c) One of the intriguing matters connected with Kircher's testimony is that he claims to be reproducing the work of Abenephius, who wrote in Arabic. Since his name is also given as Rabbi Barachias Abenephius he was evidently a Jew. Who was this savant? Of what name is this the Latinized form? The British Museum catalogue contains no such name; and once again a number of authorities whom I consulted had never heard of him. Kircher also calls him Barachias Abenephi (II. ii. 117) and sometimes Albenephi. If only one could secure his works it might be possible to trace matters back step by step through several centuries

and to find the earliest example of the Zodiac scheme in question. Kircher ascribes to him a book on the ancient Egyptians and it is curious that one can find no trace of book or writer.

In the *Life of Peiresc* (or Peireski), the French archaeologist (1580–1637), by Gassendi, there is an interesting reference to Kircher and to a rare manuscript by Rabbi Barachias Abenephius which Kircher claimed to have in his possession (v. 165). It has been pointed out in an unpublished work on Kircher's correspondence (M.A. thesis in the library of London University), by J. E. Fletcher, now of Sydney University, that notes on this manuscript are alleged to be in the Bibliothèque Nationale at Paris, the writer's name being given as Barachias Nephi:

Notes sur trois urnes de marbre antiques de la mosquée du grand Caire, sur les colonnes de pierre du Sinai, sur un Ms. de Barachias Nephi, apporté à Peiresc par le Père Kircher le 3 Sept. 1633.

I have not found it practicable to follow up this possible clue in any way. In fact, in the later stages of my inquiry it became doubtful if this elusive Abenephius ever existed! The Arabic which Kircher reproduces is highly suspicious. Professor M. Plessner has kindly examined it and gives as his conclusion that the Arabic is so grotesque that it cannot possibly be a genuine quotation. It must, he says, be Kircher's own 're-translation' into a non-existent 'original' Arabic, the Latin version of which, like Abenephius himself, is one of Kircher's many inventions.

It seems then that Abenephius should be dismissed from our inquiry. And even if some relevant evidence earlier than the seventeenth century should come to light, we still have a long way to go in order to establish the existence of a scheme which could have been known to John the Seer.

The names of the gems in Kircher's list are practically identical with those of the Vulgate for Rev. xxi; and yet, as far as I can see, Kircher does not draw attention to this. Perhaps the omission was intentional. It could be that in creating this scheme of correspondences he made use of the twelve precious stones of the New Jerusalem, perhaps reversing the order to disguise his source. But as we have seen, the important point is that at the moment no evidence of this Zodiac scheme has come to hand earlier than 1653.

Any value which the present article contains is of a negative kind. The problem of the order of gems in Rev. xxi still remains. One factor to bear in mind is this: the whole question of John's use of the Old Testament is involved. If Revelation, or parts of it, were written on the island of Patmos in captivity conditions, can we assume that scrolls of the Old Testament were available? It is significant that the Old Testament references, numerous as they are, are not in exact agreement with

the Greek versions known to us, and in fact there is no extended quotation such as we find so often in the Gospels and in Paul. The seer must have had an astonishing memory if he drew upon the Old Testament without being able to consult it; but this is not by any means to be ruled out. It may be that the list of gems is based upon what the writer could recall of those on the high priest's breastplate. This would account for the discrepancies in wording and order; as mentioned at the outset only eight of the gems are given the names accorded to them in the LXX of Exodus.

Perhaps the wisest word on the subject comes from Austin Farrer (*Revelation of St. John* (1964), p. 219) and it may well be impossible to take the matter further:

St. John does not adhere either to the order or to the names of the stones in the LXX Greek of Exodus, and any query we may raise about translations of the Hebrew names which he might have preferred to those offered by the LXX can only land us in an abyss of uncertainty. It is reasonable to suppose that he did not trouble to do more than give a euphonious list in some general correspondence with the Exodus catalogue. He has so arranged the Greek names, as to emphasize the division by threes. All but three of them end with s sounds, and the three exceptions with s sounds. He has placed the s endings at the points of division, thus: Jaspis, sapphiros, chalcedon; smaragdos, sardonyx, sardion; chrysolithos, beryllos, topazion; chrysoprasos, hyacinthos, amethystos.

T. Francis Glasson

EURAQUILO AND MELITA

In an interesting recent study² A. Acworth argues that Melita, the island of St. Paul's shipwreck, was not Malta, but Mljet in the Adriatic, which also then bore the name Melita. He maintains in particular that the storm-wind which drove the ship from Crete, the 'Euroclydon' of the TR, was a south-easter, and the course must accordingly be sought far to the north of the line to Malta.

Acworth seems to be unduly summary in his treatment of the arguments for Malta, which are much stronger than he suggests. Nor does he do justice to the work of James Smith,³ who argues rigorously from

- ¹ Among those to whom I have been indebted for help at various stages are (in addition to those mentioned in the preceding) Drs. Walter Pagel, Otto Kurz, R. J. Zwi Werblowsky (Jerusalem), R. A. Parker (U.S.A.), J. H. Plumley, and Mr. Terence J. Deakin.
- ² Acworth, 'Where Was St. Paul Shipwrecked? A Re-examination of the Evidence', J.T.S. N.S. xxiv (1973), pp. 190-2.
 - ³ Smith, The Voyage and Shipwreck of St. Paul (London, 3rd ed., 1866).